



BORDER WINDS ENERGY PROJECT

WEEKLY PROJECT REPORT

Weekly report no:	29
Report for week period ending COB Friday:	02/13/2015
Calendar week no:	7

Executive Summary

This Week's Highlights

- Wall sheeting continued at O&M Building – all sides of building completed;
- Ground heating and foundation excavation continues at substation site;
- Self-perform personnel were on site to create crane paths for scheduling of crane walks and trenching sequence;
- Received 10 reels of 750Kcmil cable for a total of 19,655 LF.

This Week's Key Issues

- Downed power lines still remain on-site and repairs by utility are on-going;
- Construction schedule being revised;
- Signage on the county roads damaged due to snow and wind being reinstalled;
- O&M and Substation work impacted this week due to extreme temperatures.



Safety

*Full description of week's Safety Log can be found in Exhibit 2

Type	Lost Time	Recordable Injury (Medical Aid)	Minor Injury (First Aid)	Equipment Property Damage	Near Miss	3X20 Observation
Current Period	0	0	0	0	0	4
Project To Date	1	0	9	19	65	435

Previous Week TRIR = 1.40 / Current Week TRIR = 1.39
 ((Lost Time + Medical Aid) * 200,000) / Total Man Hours

Previous Week RES Safety Index = 0.95 / Current Week RES Safety Index = 0.94
 ((Lost Time * 64) + (Injury * 16) + (Minor Injury * 4) + (Damage * 1) + (Near Miss * 0.25)) / Man Hours * 1000

Weeks Highlights:

- Shelter for the port-o-toilets is 100% complete.
- Despite inclement weather, no injuries or incidents have been recorded.

Weeks Issues:

- Temperature wind chills in excess of -30, continue to impact production.

Project Work Hours:

- Weekly Man-hours: 1,140
- PTD Man-hours: 143,011



Environmental

*Full description of week's Environmental Report can be found in Exhibit 2

Type	Major Incident	Minor Incident	Near Miss	Observation
Current Period	0	0	0	2
Project to Date	0	47	3	21

Rolling Incident Score

Previous week: 0.92 Current Week: 0.90

Week's Highlights:

- Frozen ground conditions.
- Temperature remained below freezing through the week. No snow thaw observed.

Week's Issues:

- Received 1.6 inch of snow on Tuesday, 2/10/2015.

Quality

*Full description of week's Quality Report can be found in Exhibit 4

Type	RES Issued NCRs			RES Issued CPARs			Client Issued NCRs			Client Issued CPARs		
	Issued	Open	Closed	Issued	Open	Closed	Issued	Open	Closed	Issued	Open	Closed
Current Period	0	0	0	0	0	0	0	0	0	0	0	0
PTD	3	3	3	0	0	0	7	1	6	0	0	0

Week's Highlights:

- Collecting information for the job books;
- Monitored construction at the O & M Building;
- Closed NCR-2014-34, Topsoil beneath subgrade fill material at the Substation.

Week's Issues:

- Torque wrench on order for checking bolts at the O & M Building



Schedule Status

Project duration	72
No. of weeks into contract	31
Contract time passed (%)	43%

Key Activities (Construction)	Weighted %	Percent Complete		
		Contract Schedule	Construction Schedule	Actual
Design Engineering	2.5%	100%	100%	100%
Roads	14%	100%	83%	83%
Crane Pads	6%	0%	0%	0%
Foundations	20%	100%	95%	95%
Collection System	20%	46%	30%	30%
Substation	10%	55%	16%	16%
WTG Delivery, Erection, MCC	20%	0%	0%	0%
O&M Building	5%	100%	28%	29%
Completion	2.5%	0%	0%	0%
Overall Actual Percent Complete				41%

Progress Report

Permit Status

Permit Type / Description	County / State	Responsible Group	Date Needed By	Status
O&M Well Permit	ND State	AB Systems	8/30/15	Pending submittal

- RFI pending regarding cost information and available potable water options.

Construction Status

Certificates	Total	Submitted	Signed
Foundation Completion Certificate	75	71	0
Mechanical Completion Certificate	75	0	0
Electrical Works Completion Certificate	1	0	0
Project Mechanical Completion Certificate	1	0	0
Project Substantial Completion Certificate	1	0	0
Project Final Completion	1	0	0



ROADS & CRANE PADS

Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Roads	70%	Roads			69%
Clear and Grub	20%	152,837	152,837	0	100%
Subgrade	25%	152,837	141,346	11,491	92%
Place and Compact Road Base	30%	207,469	185,555	21,914	89%
Shoulders	15%	152,837	0	152,837	0%
Ditches	10%	152,837	0	152,837	0%
Crane Pads	30%	Crane Pads			0%
Shape and Compact Sub Grade	40%	75	0	75	0%
Place and Compact Road Base	60%	75	0	75	0%

Comments:

- Construction of new roads is on hold due to frozen subgrade conditions
 - Road construction planned to resume mid-May, 2015;
- Completed staging Class 5 aggregate for construction of crane pads at first 28 turbine sites in erection sequence;
 - Aggregate was found to be out of specification. Supplier provided 28 loads of clean 1-inch material for blending with the existing aggregate. This remediation has been approved by RES Engineering.

FOUNDATIONS

Item	Weighted %	Budget	Total Completed	Total Remaining	Percent Complete
Excavations	10%	75	71	4	95%
Mud Mats	5%	75	71	4	95%
Bases	45%	75	71	4	95%
Pedestals	20%	75	71	4	95%
Backfilled	15%	75	71	4	95%
Vestas Ground Kit	5%	75	71	4	95%

Foundation Progress 95%



Comments:

- Foundation construction planned to resume mid-May, 2015

COLLECTION SYSTEM

Item	Weighted %	Quantity	Total Received	Total Remaining	Percent Complete
Deliveries		30.0%	Deliveries		86%
Grounding Transformers	10.0%	6	0	6	0.0%
MV Cable 3/0 AWG AL	15.0%	308,288	314,910	0	100%
MV Cable 350 Kcmil AL	7.5%	140,708	143,964	0	100%
MV Cable 750 Kcmil AL	15.0%	217,740	208,085	9,655	96%
MV Cable 1000 Kcmil AL	7.5%	88,167	90,485	0	100%
MV Cable 1250 Kcmil AL	20.0%	147,069	150,472	0	100%
Fiber 12 count	2.5%	328,520	336,590	0	100%
Fiber 120 count	2.5%	6,587	6,587	0	100%
Ground Cable	10.0%	299,663	299,663	0	100%
Junction Boxes	5.0%	28	28	0	100%
Rubber Goods	5.0%	1420	772	648	54%
Installations		50.0%	Installations		5%
Trench	60%	278,230	24,611	253,619	8%
MV & Fiber/Ground Cable	30%	297,841	31,052	266,789	10%
Grounding Transformers	5%	6	0	6	0.0%
Junction Boxes	5%	28	0	28	0.0%
Terminations		20.0%	Terminations		0.0%
Grounding Transformers	10.0%	6	0	6	0.0%
Junction Boxes	30.0%	28	0	28	0.0%
Turbines	60.0%	75	0	75	0.0%

Collection System Progress: 30%

Comments:

- Awaiting TOV study from RES Engineering for submittal to Xcel. Once reviewed by Xcel, grounding transformers will be approved;
- Bryan Whiteaker, Mike Erikson, and Bob Atterberry were on site to create crane paths for scheduling of crane walks and trenching sequence;
- Received 10 reels of 750Kcmil cable for a total of 19,655 LF;
- Met with representative from Northern Plains Electric to discuss line burials and power to the substation;
- Coordinating order completion of rubber goods materials;



- Continued to contact Jeff Richardson in Procurement regarding contracts for Northern Plains Electric and ground grid tester;
- Collector construction planned to resume late March / early April, 2015.

O&M BUILDING

Activity Description	Required	Unit	To Date Total	Remains	% Comp.
Earthworks	100	%	85	15	85%
Foundation	100	%	85	15	85%
Deliver Building	100	%	100	0	100%
Building Enclosed	100	%	73	27	73%
Building Interior Framing	100	%	0	100	0%
Building Electrical	100	%	0	100	0%
Building HVAC	100	%	0	100	0%
Plumbing	100	%	0	100	0%
Building Interior Trim & Finishing	100	%	0	100	0%
Septic System	100	%	0	100	0%
Water Well	100	%	0	100	0%
Fence and Yard Rock	100	%	0	100	0%

O&M Building Progress: 29%

Comments:

- Extreme cold weather causing two and a half days of downtime on February 11th, 12th, and 13th;
- PCS has completed wall sheeting for all sides. Roof enclosure will begin next week, weather permitting;
- Received Xcel's final comments on the O&M drawing package. RES will work with subcontractor to incorporate the comments and issue IFCs;
- Xcel responded to RFI 23053-040 regarding the O&M finishes selection and provided a list with the selections.



Substation

Item	Weighted	Required	Total Completed	Total Remaining	Percent Complete
Design	20%	Design			
Design Drawings	20%	100	70	30	70.0%
Deliveries	35%	Deliveries			
Structural Steel	5%	100	0	100	0.0%
Main Transformer	15%	100	0	100	0.0%
Control House	5%	100	0	100	0.0%
Relay Panel	2.5%	100	0	100	0.0%
Arrestors	2.5%	100	0	100	0.0%
Switches	2.5%	100	0	100	0.0%
Breakers	2.5%	100	0	100	0.0%
Construction	45%	Construction			
Grading & Drainage	5%	100	75	25	75.0%
Foundations	10%	100	0	100	0.0%
Underground/Grounding	5%	100	0	100	0.0%
Structural Steel Work	5%	100	0	100	0.0%
Equipment Installation	5%	100	0	100	0.0%
Control Building/Wiring	5%	100	0	100	0.0%
Transformer Fit Out	5%	100	0	100	0.0%
Commission	5%	100	0	100	0.0%
Fence, Gravel, & Clean Up	2.5%	100	0	100	0.0%

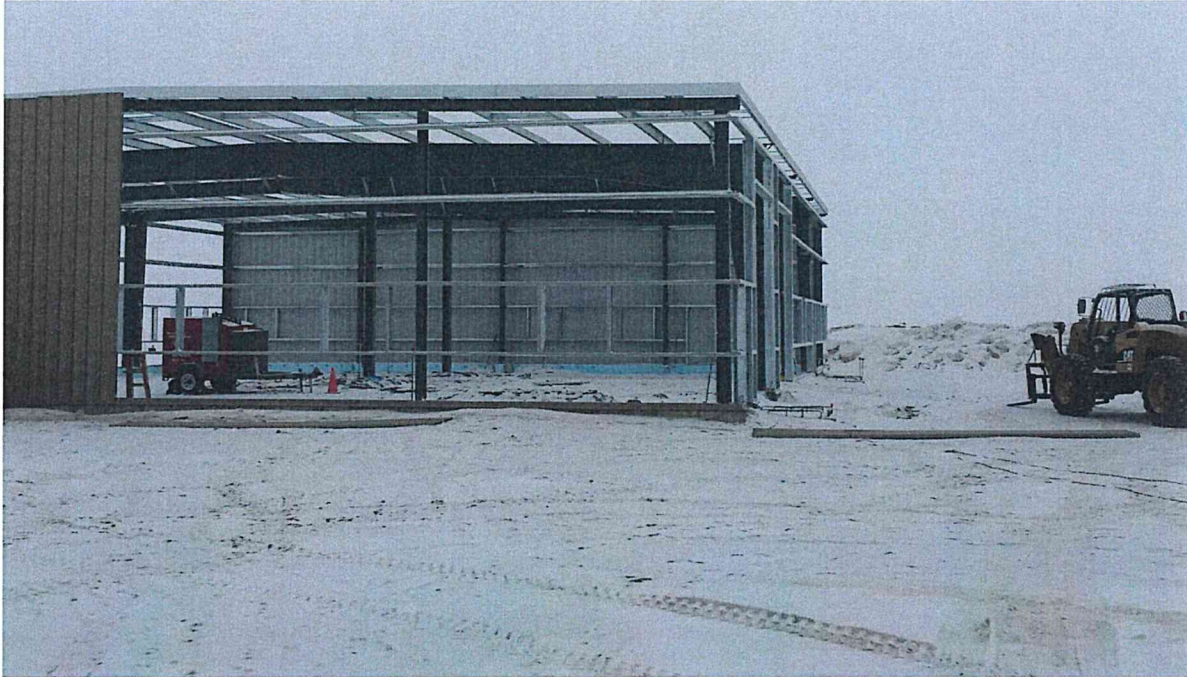
Substation Progress: 16%

Comments:

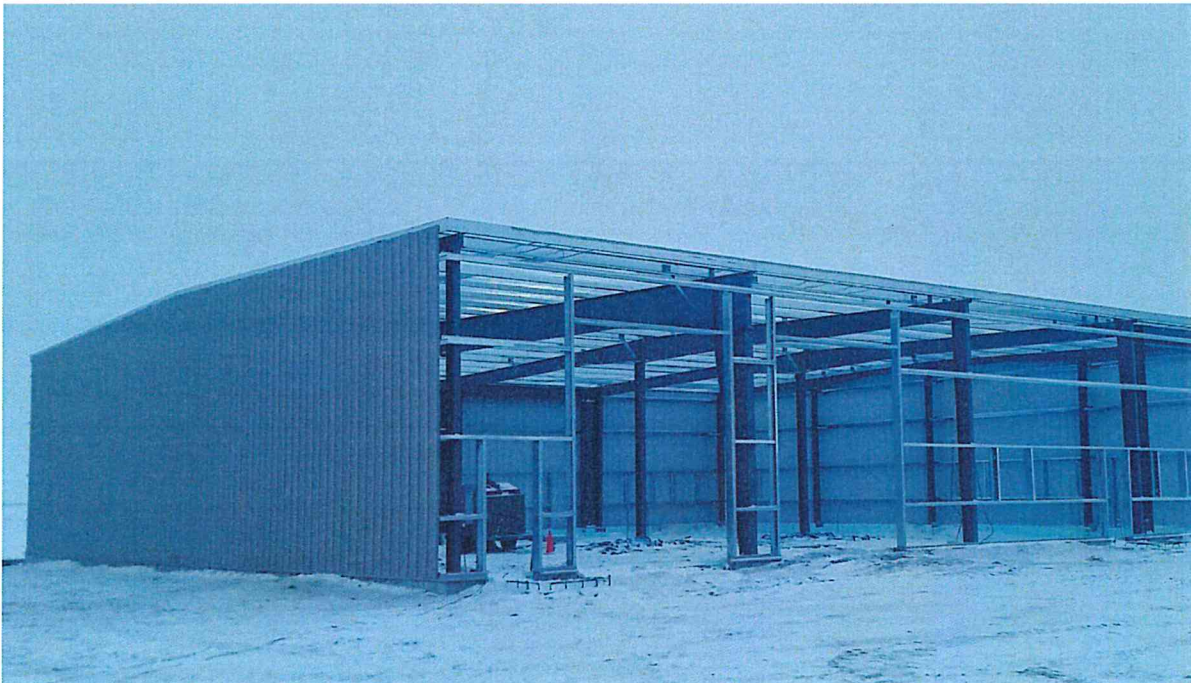
- Ground heating and thaw preparations for excavations commenced;
- Continuous snow removal and staging of connex for wind breaks; and
- Began excavating low-side MV collection circuit breakers.



Exhibit 1 – Site Photographs



O&M Building North & South Wall Sheeting



O&M Building East Wall Sheeting



O&M Building West Wall Sheeting



Sunrise at Border Wind



O&M Building Corner Enclosures



Exhibit 2 – Safety log

#	Date:	Incident Observed During:	Incident Type:	Company Involved:	Incident Details:	Corrective Action Details:	Actions Taken to Prevent Reoccurrence:
398	2/9/2015	Safety Walk	Hazard Observation	PCS	The breaker at the O&M building was Arcing.	Electrical Supervisor Aaron Thooft replaced the breaker and corrected the hazards before the breaker completely failed. In doing so prior to any work being done all energized parts were disconnected.	PCS was advised that for future reference if the breaker were to arc again to do exactly as they did before and notify the Electrical Supervisor Aaron Thooft.
399	2/9/2015	Safety Walk	Safe Work Observation	PCS	Employees were utilizing their scissor lift in the proper way when sheeting the walls of the O&M building.	None, this was a Safe Observation.	None, this was a Safe Observation.
400	2/10/2015	Safety Walk	Safe Work Observation	Rosendin	Employee's trenched the work area properly and set barricades before moving to another location.	None, this was a Safe Observation.	None, this was a Safe Observation.
401	2/11/2015	Safety Inspection	Safe Work Observation	RES Americas	Section 1 Job information and Setup completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
402	2/11/2015	Safety Inspection	Safe Work Observation	RES Americas	Section 2 Housekeeping and Sanitation completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
403	2/11/2015	Safety Inspection	Safe Work Observation	RES Americas	Section 3 Fire Prevention completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
404	2/11/2015	Safety Inspection	Safe Work Observation	RES Americas	Section 4 Compound Electrics completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.



405	2/11/2015	Safety Inspection	Safe Work Observation	RES Americas	Section 5 Electrical Work completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.
406	2/12/2015	Safety Walk	Safe Work Observation	RES Earth and Cable	Employee's safely removed snow banks around the building with little difficulty.	None, this was a Safe Observation.	None, this was a Safe Observation.
407	2/12/2015	Safety Inspection	Safe Work Observation	RES Americas	Section 6 Hand Tools completed. Adequate at the time of inspection.	None, this was a Safe Observation.	None, this was a Safe Observation.



Exhibit 3 – Environmental Log

#	CLASS	SUB-CAT	CONTRACTOR	DATE	INCIDENT DETAILS	ACTION TAKEN TO CORRECT SITUATION	ACTION TAKEN TO PREVENT REOCCURANCE
23053-15-22	Observation	Weather Event	All	02/11/2015	Received 1.6" snow on the site.	Frozen ground. BMP inspection will be conducted after the snow melts.	Inspect BMPs in case of snow thaw.
23053-15-23	Observation	Weather Event	All	02/13/2015	Frozen subgrade. No snow thaw observed. Temperature below freezing.	No action required.	Inspect BMPs in case of snow thaw.



Exhibit 4 – Quality Log

- Incidents - None
- CPARs - None
- NCRs - 8

Material Receipt

Description of Material	Delivery Date	Vendor	Quantity	Cumulative Qty	Balance

Description of Material	NCR Opened (Current Period)	NCR Closed (Current Period)	Total NCR Open (As of this Month)	Total NCR Closed (As of this month)
Totals			2	6
NCR-2014-34, Topsoil beneath subgrade fill material at the Substation			X	
NCR-2014-38, T3 grounding was not installed per specifications			X	



**FIELD QUALITY CONTROL PROGRAM
DEFICIENCY REPORT REGISTER**

No.	Description i.e. Roads, Foundations, Electrical	LOCATION	Turbine #	Test Document No:	DEFICIENCY DESCRIPTION	DATE ENTERED	DATE CLEARED
1	Roads, Culverts	Road K2 Sta. 21+00	T-28/T-29	USCF-001	Incorrect Culvert Installation	9/29/2014	11/24/2014
2	Roads, Culverts	Road W# Sta. 00+12	T-59	USCF-001	Incorrect Culvert Installation	9/29/2014	
3	Foundations	T-49 Base	T-49	USCF-002	Foundation not protected for cold weather per ACI 306	10/08/2014	11/05/2014
4	Roads, Culverts	105 th Ave Sta. 15+25		USCF-001	Geogrid not replace after installation	10/14/2014	
5	Roads, Culverts	Access Road T2	T-74	USCF-001	Road alignment incorrect, Culverts missing	9/30/2014	
6	Roads, Culverts	N1 00+00	T-45	USCF-001	Culvert installation not per specifications	11/05/2014	
7	Roads, Culverts	108 th Ave. at T-24		USCF-001	Geogrid is showing through the class 5 material	11/10/2014	
8	Roads, Culverts	Access roads to T-9, T-10, T-11, T-34, T-35 & T-71		USCF-001	Class 5 material is out of specification.	11/13/2014	
9	Roads, Culverts	Access road to T-37 Sta. 8+00	T-13	USCF-001	Geogrid is damaged	11/13/2014	
10	Roads, Culverts	Culvert at T-26	T-26	USCF-001	Needs to be extended on west end	11/23/2014	
11	Roads, Culverts	Access Road C2	T-10	USCF-001	The access road needs to be re-aligned per the land owner's request	12/03/2014	
12	Foundations	O&M Building		USCF-002	Stoop footer at S/E end of building has wrong backfill material	12/05/2014	



Exhibit 5 – RFI Log

*Open RFIs and RFIs closed last week

	Generated By	Company	Sent To	Company	Subject	Date Sent	Response Requested By	Type: Civil, Electrical, etc.	Status / Comments	Date Closed
23053-30	Shabeeb Abdul Khader	RES	Bradley Morrison	Xcel Energy - Generation	Install crushed aggregate on the substation site	10/31/2014	11/6/2014	Civil	Xcel Responded; RES to test in the Spring.	
23053-40	Emad Alaydi	RES	Brad Morrison	Xcel Energy - Generation	Border Winds- O&M Building Color & Finishes Selection	1/16/2015	1/22/2015	O&M	Xcel coordinating with AB system	02/12/2015
23053-42	Emad Alaydi	RES	Tim Boardman	AB Systems	Potable Water - O&M	1/22/2014	1/29/2015	O&M	Water sample sent for testing	
23053-45	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	Substation - Styrofoam	2/9/2015	2/17/2015	Substation		02/11/2015
23053-46	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	Stairs - Oil Containment	2/9/2015	2/18/2015	Substation		02/11/2015
23053-47	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	Add 100w Fixtures Into Yard Lighting	2/11/2015	2/18/2015	Electrical		
23053-48	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	Electrical Equipment Enclosure Outlets	2/11/2015	2/18/2015	Electrical		
23053-49	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	Required CT Circuit Wired to Electrical Equipment Enclosure	2/11/2015	2/18/2015	Electrical		
23053-50	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	Electrical Equipment Enclosure Alarms	2/11/2015	2/18/2015	Electrical		
23053-51	Lester Archer	RES	Brad Morrison	Xcel Energy - Generation	DC Station Battery	2/13/2015	2/20/2015	Electrical		